

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the subject application. The non-Final Office Action of November 7, 2002 has been received and contents carefully reviewed.

Claims 1-16 and 18-37 are currently pending. Claims 1, 4, 8, 12-16, 18, and 37 have been amended. Reexamination and reconsideration are respectfully requested.

The Examiner rejected claim 30 under 35 USC 112, second paragraph as being indefinite as to the alignment characteristics; and rejected claim 8 under 35 USC 112, second paragraph as being indefinite as to the shape of the TFT. Applicants respectfully traverse these rejections.

Applicants have previously referred the Examiner to portions of the specification that may help the Examiner understand the claim language of claims 28 and 30. The Applicants directs the Examiner to at least figures 7A-11E and pages 16-19 of the specification of this application for further understanding of claim 30. For example, page 18, lines 14-24 of the specification disclose that "the liquid crystal molecule of the liquid crystal layer may be aligned differently on each region" (see for example, claim 28), that "alignment process or alignment direction is varied" (see for example, claim 28), and that "at least one region of the divided regions may be a non-alignment region or all the divided regions may be a non-alignment region" (see for example, claim 30). Applicants submit that the recitation of "the regions of the alignment film are not aligned" in dependent claim 30 is supported by the recitation in base claim 28 that "at least two regions...have different alignment characteristics ..."

In view of the amendment to claim 8, the rejected is deemed moot.

Applicants respectfully submit that claims 8 and 30 and all of the pending claims comply with 35 USC § 112 and request that the rejection be withdrawn.

The Examiner rejected claims 1-16 and 18-37 under 35 USC 102(e) as being anticipated by Kim et al. (US Patent No. 6,462,798). Applicants respectfully traverse this rejection.

Claims 1, 4, 12-16, 18, and 37 are allowable at least for the reason that claims 1, 4 12-16, 18, and 37 recite a combination of elements including “a pixel electrode..., wherein the pixel electrode is divided into a plurality of domains,...; a plurality of electric field distortion dielectric structures in the plurality of domains, wherein the dielectric structure in the neighboring domains have unequal shapes.” None of the cited references teaches or suggests each and every feature of the claims.

Moreover, claims 2, 3, 5-11, and 19-36 are allowable by virtue of their dependence on independent claims, which are believed to be allowable.

Applicants respectfully request that the rejection under 35 USC 102(e) be withdrawn.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned **“Version with markings to show changes made.”**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited. Should the Examiner deem that a telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at (202) 496-7371.


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If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136. Please credit any overpayment to deposit Account No. 50-0911.

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Respectfully submitted,

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Version With Markings to Show Changes Made

In the Claims

Please amend the claims as follows (A marked-up version of the amended claims is attached):

In the Claims

Please amend the claims as follows:

1. (Amended) A multi-domain liquid crystal display device comprising:
first and second substrates opposing each other between a liquid crystal layer;
a plurality of gate lines and data lines on the first substrate lengthwise and crosswise, to define a pixel region;
a common auxiliary electrode on a layer equal to the gate lines to surround the pixel region;
a gate insulating film on the first substrate;
a passivation film on the gate insulating film including the first substrate;
a pixel electrode in the pixel region, wherein the pixel electrode is divided into a plurality of domains;
a light-shielding layer on the second substrate;
a color filter layer on the light-shielding layer;
a common electrode on the color filter layer;
a plurality of electric field distortion dielectric structures [patterned in different forms within neighboring pixels] in the plurality of domains, wherein the dielectric structure in the neighboring domains have unequal shapes; and

an alignment film on at least one of the first and second substrates.

4. (Amended) A multi-domain liquid crystal display device comprising:
first and second substrates opposing each other between a liquid crystal layer;
a plurality of gate bus lines and data lines on the first substrate lengthwise and crosswise,
to define a pixel region;
a common auxiliary electrode on a layer equal to the gate lines to surround the pixel
region;
a gate insulating film on the first substrate;
a passivation film on the gate insulating film including the first substrate;
a pixel electrode in the pixel region, wherein the pixel electrode is divided into a plurality
of domains, the pixel electrode not overlapping the common auxiliary electrode;
a light-shielding layer on the second substrate;
a color filter layer on the light-shielding layer;
a common electrode on the color filter layer;
a plurality of electric field distortion dielectric structures [patterned in different forms
within neighboring pixels] in the plurality of domains, wherein the dielectric structure in the
neighboring domains have unequal shapes; and
an alignment film on at least one of the first and second substrates.

8. (Amended) The multi-domain liquid crystal display device as claimed in claim 1,
further comprising a[n L-shaped] thin film transistor formed in a crossing point of the gate lines
and the data lines.

12. (Amended) A multi-domain liquid crystal display device comprising:

first and second substrates opposing each other between a liquid crystal layer;

a plurality of gate bus lines and data lines on the first substrate lengthwise and crosswise, to define a pixel region;

a common auxiliary electrode on a layer equal to the gate lines to surround the pixel region;

a gate insulating film on the first substrate;

a passivation film on the gate insulating film including the first substrate, the pixel electrode having an electric field induction window therein;

a pixel electrode in the pixel region, wherein the pixel electrode is divided into a plurality of domains;

a light-shielding layer on the second substrate;

a color filter layer on the light-shielding layer;

a common electrode on the color filter layer;

a plurality of electric field distortion dielectric structures [patterned in different forms within neighboring pixels] in the plurality of domains, wherein the dielectric structure in the neighboring domains have unequal shapes; and

an alignment film on at least one of the first and second substrates.

13. (Amended) A multi-domain liquid crystal display device comprising:

first and second substrates opposing each other between a liquid crystal layer;

a plurality of gate bus lines and data lines on the first substrate lengthwise and crosswise, to define a pixel region;

a common auxiliary electrode on a layer equal to the gate lines to surround the pixel region;

a gate insulating film on the first substrate;

a passivation film on the gate insulating film including the first substrate, the passivation film having an electric field induction window therein;

a pixel electrode in the pixel region, wherein the pixel electrode is divided into a plurality of domains;

a light-shielding layer on the second substrate;

a color filter layer on the light-shielding layer;

a common electrode on the color filter layer;

a plurality of electric field distortion dielectric structures [patterned in different forms within neighboring pixels] in the plurality of domains, wherein the dielectric structure in the neighboring domains have unequal shapes; and

an alignment film on at least one of the first and second substrates.

14. (Amended) A multi-domain liquid crystal display device comprising:

first and second substrates opposing each other between a liquid crystal layer;

a plurality of gate bus lines and data lines on the first substrate lengthwise and crosswise, to define a pixel region;

a common auxiliary electrode on a layer equal to the gate lines to surround the pixel region;

a gate insulating film on the first substrate, the gate insulating film having an electric field induction window therein;

a passivation film on the gate insulating film including the first substrate;

a pixel electrode in the pixel region, wherein the pixel electrode is divided into a plurality of domains;

a light-shielding layer on the second substrate;

a color filter layer on the light-shielding layer;

a common electrode on the color filter layer;

a plurality of electric field distortion dielectric structures [patterned in different forms within neighboring pixels] in the plurality of domains, wherein the dielectric structure in the neighboring domains have unequal shapes; and

an alignment film on at least one of the first and second substrates.

15. (Amended) A multi-domain liquid crystal display device comprising:

first and second substrates opposing each other between a liquid crystal layer;

a plurality of gate bus lines and data lines on the first substrate lengthwise and crosswise, to define a pixel region;

a common auxiliary electrode on a layer equal to the gate lines to surround the pixel region;

a gate insulating film on the first substrate;

a passivation film on the gate insulating film including the first substrate;

a pixel electrode in the pixel region, wherein the pixel electrode is divided into a plurality of domains;

a light-shielding layer on the second substrate;

a color filter layer on the light-shielding layer;

a common electrode on the color filter layer, the common electrode having an electric field induction window therein;

a plurality of electric field distortion dielectric structures [patterned in different forms within neighboring pixels] in the plurality of domains, wherein the dielectric structure in the neighboring domains have unequal shapes; and
an alignment film on at least one of the first and second substrates.

16. (Amended) A multi-domain liquid crystal display device comprising:
first and second substrates opposing each other between a liquid crystal layer;
a plurality of gate bus lines and data lines on the first substrate lengthwise and crosswise, to define a pixel region;
a common auxiliary electrode on a layer equal to the gate lines to surround the pixel region;
a gate insulating film on the first substrate;
a passivation film on the gate insulating film including the first substrate;
a pixel electrode in the pixel region, wherein the pixel electrode is divided into a plurality of domains;
a light-shielding layer on the second substrate;
a color filter layer on the light-shielding layer, the color filter layer having an electric field induction window therein;
a common electrode on the color filter layer;
a plurality of electric field distortion dielectric structures [patterned in different forms within neighboring pixels] in the plurality of domains, wherein the dielectric structure in the neighboring domains have unequal shapes; and
an alignment film on at least one of the first and second substrates.

18. (Amended) A multi-domain liquid crystal display device comprising:

- first and second substrates opposing each other between a liquid crystal layer;
- a plurality of gate bus lines and data lines on the first substrate lengthwise and crosswise, to define a pixel region;
- a common auxiliary electrode on a layer equal to the gate lines to surround the pixel region;
- a gate insulating film on the first substrate;
- a passivation film on the gate insulating film including the first substrate;
- a pixel electrode in the pixel region, wherein the pixel electrode is divided into a plurality of domains;
- a light-shielding layer on the second substrate;
- a color filter layer on the light-shielding layer;
- an over coat layer on the color filter layer, the over coat layer having an electric field induction window therein;
- a common electrode on the over coat layer;
- a plurality of electric field distortion dielectric structures [patterned in different forms within neighboring pixels] in the plurality of domains, wherein the dielectric structure in the neighboring domains have unequal shapes; and
- an alignment film on at least one of the first and second substrates.

37. (Amended) A multi-domain liquid crystal display device comprising:

- a data line to apply a data signal;
- a pixel electrode for driving a liquid crystal, wherein the pixel electrode is divided into a plurality of domains, the pixel electrode having an electric field induction window therein;

a gate line crossed to the data line, to define a pixel region;

a common auxiliary electrode formed to surround the pixel region; and

a plurality of electric field distortion dielectric structures [patterned in different forms within neighboring pixels] in the plurality of domains, wherein the dielectric structure in the neighboring domains have unequal shapes.